

Christopher J. D. POMFRETT, *et al.*  
Serial No. 10/553,745  
February 11, 2011

### **REMARKS/ARGUMENTS**

Further consideration of this application is respectfully requested.

Examiner Stout is thanked for a helpful interview with the undersigned and, by telephone, with inventor Dr. Christopher Pomfrett and European Patent Attorney Mark Kenrick.

As a result of the interview on February 8, 2011, and a follow-up conversation with Examiner Stout on February 10, 2011, it is understood that the above amendments will place this application now in entirely allowed condition.

A brief summary of the comments offered during the interview is included in the following remarks.

The cited Boone reference is, of course, relevant because it is an example of prior EIT technology. Indeed, it is this very reference that has been focused upon in the applicants' specification as background to the invention.

The John references are simple examples of a considerable amount of prior art dealing with the measurement of evoked potentials and the fact that such evoked potentials can be expected to occur at different respective times from the occurrences of a stimulus corresponding respectively to different portions of the brain as understood from *a priori* knowledge of a neurological model.

Christopher J. D. POMFRETT, *et al.*  
Serial No. 10/553,745  
February 11, 2011

In fact, these two quite different braches of science have existed contemporaneously for many years. See, for example, inventor Pomfrett's own 1995 article also discussed in the background section of the present specification and the fact that the Boone reference also has priority dates going back to 1995.

In spite of these parallel co-existing technologies, prior to the applicants' inspired discovery, no one had thought to trigger an EIT type of process at a predetermined delay after a stimulus, the delay being chosen so as to monitor a physiological response of a specific part of the nervous system based upon a neurological model, etc. Indeed, as the inventor related during the interview, when the inventor had the insight to try this sort of controlled triggering of electrical impedance measurements, it was necessary to investigate and modify the existing available EIT apparatus so as to even permit a purposeful time-delayed triggering of an impedance measurement.

In short, it was clearly not obvious to any other person of any level of skill in the art (let alone the relevant person of only "ordinary" skill) to conceive of the possible improvements and new results that might be at hand if one could, in fact, effect such a purposeful time delay between a stimulus and impedance measurements.

Christopher J. D. POMFRETT, *et al.*  
Serial No. 10/553,745  
February 11, 2011

Boone clearly does not teach any such purposeful delay. Indeed, the interface 40 in Boone directly triggers both the stimulus pulse generator 70 and the current generator 50 without any delay whatsoever (e.g., see the waveforms in Fig. 2). The “preselected delay” mentioned at paragraph [0034] of John '372 is, of course, merely a part of the long-standing EEG technology and does not in any way teach or suggest introducing a similar preselected delay into an EIT technology such as Boone's.

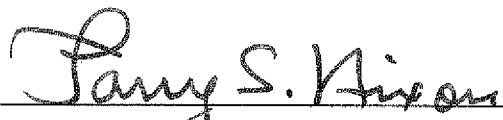
In consultation with Examiner Stout, the above amendment to pending claims and the language in new claims 47-50 have been chosen so as to emphasize the novel and non-obvious purposeful delay between stimulus and impedance measurements of a nervous system.

Christopher J. D. POMFRETT, *et al.*  
Serial No. 10/553,745  
February 11, 2011

Accordingly, this entire application is now believed to be in allowable form, and a formal notice to that effect is earnestly solicited.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By:   
Larry S. Nixon  
Reg. No. 25,640

LSN:lef

901 North Glebe Road, 11<sup>th</sup> Floor  
Arlington, VA 22203-1808  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100